Listing of the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-13. (Canceled).

14. (Currently Amended) A method for operating a radar sensor, comprising:

generating radar pulses by passing a continuous microwave signal through an RF switch that is periodically controlled by a pulse signal; and

modulating the pulse signal for controlling the RF switch in such a manner whereby the spectral lines of the pulse signal are expanded without causing any degree of decorrelation between the modulated and unmodulated pulse signals.

15. (Previously Presented) The method as recited in Claim 14, wherein at least one of an input signal and an output signal of the RF switch is one of low-pass filtered and band-pass filtered.

16. (Previously Presented) The method as recited in Claim 14, wherein the pulse signal is frequency modulated, and wherein the modulation index in frequency modulating the pulse signal is selected to be approximately 0.1.

17. (Currently Amended) A radar sensor, comprising:

an oscillator for generating a continuous microwave signal;

at least one RF switch in a transmission branch and at least one RF switch in a receiving branch; and

a control unit for controlling the RF switches;

wherein the at least one RF switch in the transmission branch receives a frequency-modulated pulse signal from the control unit, whereby radar pulses are generated by passing the continuous microwave signal through the at least one RF switch in the transmission branch that is periodically controlled by the frequency-modulated pulse signal from the control unit, and wherein the frequency-modulated pulse signal from the control unit for controlling the at least one RF switch in the transmission branch is modulated in

such a manner whereby the spectral lines of the pulse signal are expanded without causing any degree of decorrelation between the modulated and unmodulated pulse signals..

18. (Previously Presented) The radar sensor as recited in Claim 17, wherein the at least one RF switch in the transmission branch and the at least one RF switch in the receiving branch are diode switches having a linear characteristic.

19. (Previously Presented) The radar sensor as recited in Claim 18, wherein the diode switches are PIN diode switches having thin intrinsic layers.

20. (Previously Presented) The radar sensor as recited in Claim 19, wherein the intrinsic layers of the PIN diode switches are dimensioned in such a manner whereby switching times of up to 400 ps are achieved.

21. (Previously Presented) The radar sensor as recited in Claim 17, wherein the at least one RF switch in the transmission branch includes a pair of diodes that are connected to ground, and wherein the pair of diodes, in the conducting state, connect the continuous microwave signal from the oscillator to a transmission antenna via blocking circuits.

22. (Previously Presented) The radar sensor as recited in Claim 21, wherein the blocking circuits have finger couplers.

23. (Previously Presented) The radar sensor as recited in Claim 17, further comprising a buffer amplifier, wherein the output of the oscillator is connected to the buffer amplifier operated at saturation.

24. (Previously Presented) The radar sensor as recited in Claim 17, wherein the oscillator is a Gunn oscillator.

25. (Previously Presented) The radar sensor as recited in Claim 17, further comprising a mixer provided on the receiving branch, wherein the mixer has a diode pair for analyzing received radar signals.

26. (Previously Presented) The radar sensor as recited in Claim 25, wherein the pair of diodes are situated adjacent to one another on a chip, and wherein the pair of diodes are situated within a ring mixer having strip conductors.